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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,715	11/21/2003	Hidemitsu Aoki	8017-1112	8854

466 7590 01/11/2006

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EXAMINER

MRUK, BRIAN P

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,715

Applicant(s)

AOKI ET AL.

Examiner

Brian P. Mruk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to Applicant's amendment filed October 18, 2005. Applicant has amended claim 1. New claims 10-19 have been added. Currently, claims 1-19 remain pending in the application.
2. The text of those sections of Title 35 U.S. Code not included in this action can be found in the prior Office action, Paper No. 20050413.
3. The rejection of claims 1-9 under 35 U.S.C. 112, second paragraph, is withdrawn in view of applicant's amendments and remarks.
4. The rejection of claims 1-5 and 7-9 under 35 U.S.C. 102(b) as being anticipated by Aoki et al, U.S. Patent No. 5,382,295, is maintained for the reasons of record.
5. The rejection of claims 1-6 under 35 U.S.C. 102(b) as being anticipated by Satoshi et al, JP 2000-219900, is maintained for the reasons of record.
6. The rejection of claims 1-9 under 35 U.S.C. 103(a) as being unpatentable over Bessho et al, U.S. Patent No. 6,440,856, is maintained for the reason of record.

NEW GROUNDS OF REJECTION

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 10-12 and 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoki et al, U.S. Patent No. 5,382,295.

Aoki et al, U.S. Patent No. 5,382,295, discloses a method for cleaning aluminum and aluminum alloys with a composition comprising 0.5-10 grams per liter of a builder, 0.5-10 grams per liter of a phosphonic acid compound, 0.1-3 grams per liter of a sequestering agent, and 0.5-5 grams per liter of a surfactant component (see abstract and col. 2, lines 25-56). It is further taught by Aoki et al that the phosphonic acid compound includes aminotrimethylenephosphonic acid, ethylenediaminetetramethylenephosphonic acid, and 1-hydroxyethylidene-1,1-diphosphonic acid (see col. 3, lines 4-35), and that suitable surfactants include ethoxylated primary alcohols (see col. 3, lines 36-46), per the requirements of the instant invention. Specifically, note Examples 1-7. Therefore, instant claims 10-12 and 14-19 are anticipated by Aoki et al, U.S. Patent No. 5,382,295.

9. Claims 10-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Satoshi et al, JP 2000-219900.

Satoshi et al, JP 2000-219900, discloses with sufficient specificity a liquid detergent composition comprising 5-70% by weight of an ethoxylated alcohol of formula 1, and 0.01-10% by weight of ethane-1-hydroxy-1,1-diphosphonic acid (see abstract), per the requirements of the instant invention. Specifically, note that the examples disclose detergent compositions that have a pH of 5, per the requirements of instant claim 13. Therefore, instant claims 10-19 are anticipated by Satoshi et al, JP 2000-219900.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 10-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bessho et al, U.S. Patent No. 6,440,856.

Bessho et al, U.S. Patent No. 6,440,856, discloses a cleaning agent and method for semiconductor parts comprising a sulfonic acid containing copolymer, a phosphonic acid containing copolymer, a phosphonic acid compound, and a surfactant (see abstract). It is further taught by Bessho et al that the phosphonic acid compound

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includes aminotrimethylenephosphonic acid, ethylenediaminetetramethylenephosphonic acid, and 1-hydroxyethylidene-1,1-diphosphonic acid (see col. 9, lines 34-60), that suitable surfactants include alkyl ethers of polyethylene glycol (see col. 10, lines 14-18), and that the pH of the cleaning agent includes pH values of 2 and 3 (see col. 11, lines 3-13), per the requirements of the instant invention.

Although Bessho et al generally discloses a cleaning agent containing a diphosphonic acid compound and an ethoxylated nonionic surfactant, the reference does not require such cleaning agents containing these components with sufficient specificity to constitute anticipation.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to have formulated a cleaning agent, as taught by Bessho et al, which contained a diphosphonic acid compound and an ethoxylated nonionic surfactant, because such hair cleaning agents fall within the scope of those taught by Bessho et al. Therefore, one of ordinary skill in the art would have had a reasonable expectation of success, because such a cleaning agent for cleaning semiconductor parts containing both a diphosphonic acid compound and an ethoxylated nonionic surfactant is expressly suggested by the Bessho et al disclosure and therefore is an obvious formulation.

Response to Arguments

12. Applicant's arguments filed October 18, 2005 have been fully considered but they are not persuasive.

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Applicant argues that Aoki et al, U.S. Patent No. 5,382,295, does not teach or suggest a composition that contains a nonionic surfactant. However, the examiner respectfully disagrees. Specifically, Aoki et al discloses that suitable surfactants include ethoxylated primary alcohols (see col. 3, lines 36-46), per the requirements of the instant invention.

Applicant further argues that Satoshi et al, JP 2000-219900, does not teach or suggest a composition that contains the claimed combination of components. However, the examiner respectfully disagrees. Specifically, Satoshi et al clearly teaches a composition that contains both an ethoxylated alcohol of formula 1 and ethane-1-hydroxy-1,1-diphosphonic acid (see abstract), per the requirements of the instant invention.

Applicant argues that Bessho et al, U.S. Patent No. 6,440,856, does not teach or suggest a composition that contains a surfactant having a contact angle as recited in the instant claims. However, the examiner respectfully disagrees. Specifically, Bessho et al clearly teaches that suitable surfactants include alkyl ethers of polyethylene glycol (see col. 10, lines 14-18), per the requirements of the instant invention. Therefore, the examiner maintains that since Bessho et al teaches the nonionic surfactant required in the instant claims, that it would inherently meet the contact angle requirement of the instant invention as well.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Mruk whose telephone number is (571) 272-1321. The examiner can normally be reached on Mon-Thurs (7:00AM-5:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BPM

Brian P Mruk
January 6, 2006

Brian P. Mruk

Brian P Mruk
Primary Examiner
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